

ORDER FOR SUPPLIES OR SERVICES										PAGE 1 OF 15									
1 CONTRACT/PURCH ORDER/ AGREEMENT NO N65540-15-D-0010			2 DELIVERY ORDER/ CALL NO 0003		3 DATE OF ORDER/ CALL (YYYYMMDD) 2016 Feb 18		4 REQ / PURCH REQUEST NO 1300550333		5 PRIORITY										
6 ISSUED BY CODE N64498 NAVAL SURFACE WARFARE CENTER PHILA (b) (6) 5001 SOUTH BROAD STREET PHILADELPHIA PA 19112			7 ADMINISTERED BY (if other than 6) CODE S5111A DCMA HAMPTON 2000 ENTERPRISE PARKWAY HAMPTON VA 23666				8 DELIVERY FOB <input checked="" type="checkbox"/> DESTINATION <input type="checkbox"/> OTHER (See Schedule if other)												
9 CONTRACTOR CODE 34246 L-3 UNIDYNE, INC. NAME LOIS SPREITZER AND 3835 E PRINCESS ANNE RD ADDRESS NORFOLK VA 23502-1539			FACILITY		10 DELIVER TO FOB POINT BY (Date) (YYYYMMDD) SEE SCHEDULE			11 MARK IF BUSINESS IS <input type="checkbox"/> SMALL <input type="checkbox"/> SMALL DISADVANTAGED <input type="checkbox"/> WOMEN-OWNED											
					12 DISCOUNT TERMS			13 MAIL INVOICES TO THE ADDRESS IN BLOCK See Item 15											
14 SHIP TO CODE N64498 NAVAL SURFACE WARFARE CENTER CARDEROCK 1601 LANGLEY AVENUE, (b) (6) PHILADELPHIA, PA 19112-5051			15 PAYMENT WILL BE MADE BY CODE HQ0338 DFAS COLUMBUS CENTER, SOUTH ENTITLEMENT O P.O. BOX 182264 COLUMBUS OH 43218-2264				MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.												
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; padding: 5px;">16 TYPE OF ORDER</td> <td style="width: 10%; padding: 5px;">DELIVERY/ CALL</td> <td style="width: 5%; padding: 5px;"><input checked="" type="checkbox"/></td> <td style="padding: 5px;">This delivery order/call is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract</td> </tr> <tr> <td style="padding: 5px;"></td> <td style="padding: 5px;">PURCHASE</td> <td style="padding: 5px;"><input type="checkbox"/></td> <td style="padding: 5px;">Reference your quote dated Furnish the following on terms specified herein REF:</td> </tr> </table>												16 TYPE OF ORDER	DELIVERY/ CALL	<input checked="" type="checkbox"/>	This delivery order/call is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract		PURCHASE	<input type="checkbox"/>	Reference your quote dated Furnish the following on terms specified herein REF:
16 TYPE OF ORDER	DELIVERY/ CALL	<input checked="" type="checkbox"/>	This delivery order/call is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract																
	PURCHASE	<input type="checkbox"/>	Reference your quote dated Furnish the following on terms specified herein REF:																
ACCEPTANCE THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME																			
NAME OF CONTRACTOR			SIGNATURE			TYPED NAME AND TITLE			DATE SIGNED (YYYYMMDD)										
<input type="checkbox"/> If this box is marked, supplier must sign Acceptance and return the following number of copies:																			
17 ACCOUNTING AND APPROPRIATION DATA/ LOCAL USE See Schedule																			
18 ITEM NO		19 SCHEDULE OF SUPPLIES/ SERVICES				20 QUANTITY ORDERED/ ACCEPTED*		21 UNIT		22 UNIT PRICE		23 AMOUNT							
		SEE SCHEDULE																	
* If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.						24. UNITED STATES OF AMERICA TEL: (b) (6) EMAIL: (b) (6) BY: Jane M. DeMatto			25 TOTAL 26 DIFFERENCES		\$695,333.20								
27a QUANTITY IN COLUMN 20 HAS BEEN <input type="checkbox"/> INSPECTED <input type="checkbox"/> RECEIVED <input type="checkbox"/> ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED																			
b SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE						c DATE (YYYYMMDD)		d PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE											
e MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE						28 SHIP NO		29 DO VOUCHER NO		30 INITIALS									
f TELEPHONE NUMBER			g E-MAIL ADDRESS			<input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL		32 PAID BY		33 AMOUNT VERIFIED CORRECT FOR									
36. I certify this account is correct and proper for payment.						31 PAYMENT <input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL				34 CHECK NUMBER									
a DATE (YYYYMMDD)		b SIGNATURE AND TITLE OF CERTIFYING OFFICER								35 BILL OF LADING NO									
37 RECEIVED AT		38 RECEIVED BY		39 DATE RECEIVED (YYYYMMDD)		40 TOTAL CONTAINERS		41 S/R ACCOUNT NO		42 S/R VOUCHER NO									

Section B - Supplies or Services and Prices

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002	Engineering and Technical Services CPFF FOB: Destination	1	Lot		(b) (4)

ESTIMATED COST
FIXED FEE
TOTAL EST COST + FEE

(b) (4)

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
000201 EXERCISED OPTION	Funding for CLIN 0002-Labor CPFF FOB: Destination PURCHASE REQUEST NUMBER: 1300550333				(b) (4)

ESTIMATED COST
FIXED FEE
TOTAL EST COST + FEE

(b) (4)

ACRN AA
CIN: 130055033300001

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0004	Support Costs COST FOB: Destination	1	Lot		(b) (4)

ESTIMATED COST

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
000401	Funding for CLIN 0004-ODCs COST FOB: Destination PURCHASE REQUEST NUMBER: 1300550333				(b) (4)
	ACRN AA CIN: 130055033300002			ESTIMATED COST	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0005	Technical Data CDRLs FOB: Destination FFP	1	Lot		(b) (4)
				NET AMT	<hr/>

Section C - Descriptions and Specifications

STATEMENT OF WORK**STATEMENT OF WORK****1.0 BACKGROUND**

- 1.1 The In-Service Engineering Agency (ISEA) at Naval Surface Warfare Center, Philadelphia (NSWC) Code 2170, in support of the US Navy's Sustainment and Modernization initiatives, requires support for Technical Refresh Hardware installation (SA 16938) and Software support (SWD 17858) aboard three (3) DDG class ships.

2.0 SCOPE

- 2.1 Provide integration, installation, testing and technical support services for the Technical Refresh of Scalable Integrated Bridge System (Scalable IBS) aboard three (3) ships, oversight/material support for 4 overseas ships of the 5 total ships, upgraded hardware installation for tech refresh, shipboard modifications, and technical support services for Scalable IBS system grooms on applicable ships in support of the Sustainment and Modernization Department (Code 2170) of the Naval Surface Warfare Center, Philadelphia NSWC), Philadelphia, PA when planned within CNO windows. The planned locations for the installation services are San Diego, CA; Pearl Harbor, HI; and Yokosuka, Japan.
- 2.2 The contractor shall accomplish the complete Scalable IBS installation in accordance with NAVSEA Standard Items and all referenced applicable documentation.
- 2.3 The contractor shall provide technical support during the ship checks, installation, integration and test phases. The contractor shall assist in the resolution of the Scalable IBS discrepancies as they may occur or are identified during the availability.

3.0 APPLICABLE DOCUMENTS

- 3.1 MIL-STD-2042A (SH) Fiber Optic Topology Installation Standard Methods for Naval Ships (Equipment/Connectors and Inter-connectors).
- 3.2 NAVSEA S9AA0-AB-GS0-010/GS0, General Specifications for Overhaul of Surface Navy Ship.
- 3.3 MIL-STD-454, Standard General Requirements for Electronic Equipment.
- 3.4 MIL-STD-1310 (Navy) Bonding and Grounding.

- 3.5 OPNAV Instruction 5100.23B, Navy Occupational Safety and Health (NAVOSH) Program Manual.
- 3.6 Standards and Interpretations, Occupational Safety and Health Chapter 1915.14, 1915.15 and 1915.16.
- 3.7 NAVSEA SL720-AA-MAN-020 FMP Management and Operations Manual
- 3.8 NAVSEA 9090-310G SHIPALT by Alteration Installation Team
- 3.9 NAVSSES Installation 4720.2E Process and Policy for Shipboard Industrial Work
- 3.10 MIL-STD-24749, Electrical Grounding, General Specifications
- 3.11 MIL-DTL-22520G, General Specification for Crimping Tools and Wire Termination.
- 3.12 NAVSEA 0967-LP-000-0110 Electronics Installation and Maintenance Book, Installation Standards
- 3.13 Government Furnished Material Listing (RFQ Timeline)
- 3.14 MIL-STD-248, Welding and Brazing Procedures and Performance Qualification.
- 3.15 MIL-STD-0022, Welded Joint Design
- 3.16 NAVSEA S9086-VH-STM-000/CH/635, Thermal Insulation.
- 3.17 NAVSEA S9086-VD-STM-000/CH-631, Painting.
- 3.18 NAVSEA 0901-LP-480-002/CD-9480, Piping systems.
- 3.19 NAVSEA SL720-AA-MAN-020 FMP Management and Operations Manual
- 3.20 NAVSEA STANDARD ITEMS
- 3.21 ANSI/ASQC Q9002-1994, Quality System, Model for Quality Assurance in production Installation, and servicing.
- 3.22 (b) (2) (REV B) REDLINE S-IBS ECDIS-N TECH REFRESH UPGRD ELECTRICAL MODIFICATIONS AND MATERIAL LIST (DDG(b) (2))

4.0 REQUIREMENTS

- 4.1 In support of the Scalable IBS Technical Refresh, the contractor shall participate in ship checks and review all referenced installation drawings in order to gain a complete understanding of installation, pre-fabrication requirements and quantity and type of cables and terminal connections required. The contractor should be aware that the specifics of the installation will change from ship to ship. The government will provide drawings to account for the differences specific to each hull closer to the time of installation.
- 4.2 Using NAVSEA Standard Items and refs 3.8 & 3.9, the contractor shall develop a QA Workbook to be maintained, and updated on-site. This Workbook shall be used to keep an in-process record of Quality Control Inspections and be provided to NSWC for review, thirty (30) days prior to start of installation. A completed copy of the QA Workbook shall be provided to NSWC 2170 personnel within two weeks after completion of each installation. The QA Workbook must be accessible/viewable to NSWC onsite personnel during the entire availability and formatted as follows:

Sect. 1 Alteration Description

Sect. 2 Personnel Qualifications and Certifications

Sect. 3 QA System Letter and Company procedures

Sect. 4 Installation POA&M

Sect. 5 Ship Installation Drawing (SID) List

Sect. 6 Work Package/Test and Inspection Plan/Records – This plan should identify areas requiring In-Process inspections by annotating steps as (I), (V), or (G) Points. This plan shall also incorporate all testing requirements.

Sect.7 Test and Inspection Records

Sect.8 Alteration Completion Report

- 4.3 Utilizing all applicable documentation, the contractor shall develop a Microsoft Access database to support provisioning of all hook-up sheets, wire markers and tracking of installation progress. The contractor shall provide on-site, the means to update this database and print out any corrected wire markers as changes become necessary. The contractor shall report to NSWC OSIC any changes required to this database. The electronic database is to be delivered to NSWC within 2 weeks after installation. This database shall include but not be limited to the following:

- a. Existing Equipment Removed Date
- b. Existing Equipment Foundation Removed Date
- c. Existing Equipment Relocated Date.
- d. New Foundations Installed Date
- e. New Foundations Painted Date
- f. Equipment Installed Date
- g. Percentage of Cabling Installed to each piece of Equipment.
- h. Percentage of Cabling Connected to each piece of Equipment
- i. Percentage of Continuity Test Completed to each piece of Equipment
- j. Date Power-up completed to each piece of equipment.
- k. Test Procedure Start Date
- l. Test Procedure, percentage completed
- m. Test Procedure Completion Date.
- n. Date Equipment arrived on site.

- 4.4 The contractor shall prepare, and maintain daily, a detailed installation milestone schedule (POA&M) based on the ship's availability. The contractor shall update this POA&M as schedules change, workflow problems occur, or other conditions warrant. The details of this POA&M will be coordinated with Ship's Force, NSWC OSIC representative, and other activities as necessary to ensure that proper support is available and interference or delays are minimized.

- 4.5 The contractor shall order, stage, and store all contractors' miscellaneous installation material.

- 4.6 Utilizing installation drawings, the contractor shall develop a material list detailing all material required to complete the installation and connectorization of Scalable IBS.
- 4.7 The contractor shall provide storage for Government Furnished Material (GFM), including installation check out spares, as determined by the Government and provided for in the applicable installation documentation. The contractor shall also provide for the transportation of material between the contractor's storage facility and ship. The contractor shall maintain identity of all items of material associated with the ship using DD form 1149's. The contractor shall maintain and update a database detailing status of material. This status will include material nomenclature, part number, quantity, location, installed date and person issued to.
- 4.8 The contractor shall provide the necessary facilities, equipment, tools and trained trade personnel to support installation and testing of all the Scalable IBS installed systems and interface equipment. In accomplishing this work:
 - 4.8.1 Contractor shall provide the services of one (1) senior installation technician for a ship check approximately 30 days prior to installation on each ship for the purpose of identifying cable runs and pre-fabrication requirements and generating red line drawings on the applicable installation drawings.
 - 4.8.2 Contractor shall maintain a daily work schedule and coordinate all work with Ship's Force, RMCs and NSWC representatives.
 - 4.8.3 Contractor shall ensure work scheduled and accomplished meets requirements of POA&M discussed in paragraph 4.4. All POA&M discrepancies and updates shall be coordinated and discussed with NSWC on-site representative on a daily basis.
 - 4.8.4 Contractor shall obtain, ship, and stage all work-site Installing Activity Furnished (IAF) incidental material necessary for each stage of the installation.
 - 4.8.5 Contractor shall ensure all trade personnel meet minimum requirements as specified within NAVSEA Technical Specification 9090-310G and shall have technical skill license and/or certifications available upon request.
 - 4.8.6 Contractor shall provide technical support during the installation, integration and test phase to assist in the resolution of Scalable IBS discrepancies as they may occur or are identified during the availability. A core group of three (3) personnel experienced in the ScalableIBS operation shall be made available, as required, during the installation, where applicable.

- 4.8.7 Contractor shall ensure compliance with all applicable safety regulations.
- 4.8.8 Contractor shall and must conform to shipboard routine with regard to cleanliness, personnel conduct, and ship's security and integrity after each installation day.
- 4.8.9 Contractor shall perform a validation check of all cables to confirm cable origin and destinations. This validation check shall consist of a continuity test for copper cables and light test for fiber cables. Fiber cables shall also be tested prior to the installation to ensure that no breaks in continuity exist.
- 4.8.10 Contractor shall perform a continuity test for all copper wiring to ensure leads have been terminated at proper connections, if applicable.
- 4.8.11 Contractor shall test and checkout all Fiber Optic cables for Optical Time Domain Response, if applicable.
- 4.8.12 Contractor shall test and checkout all ST/SC Connectors and cables with Power Meter for dB-loss, if applicable.
- 4.8.13 Contractor shall test and checkout any other disturbed or restored systems, if applicable.
- 4.8.14 Contractor shall integrate all the components into the local area networks, if required.
- 4.8.15 Contractor shall test and check functionality of all installed measuring devices, if applicable.
- 4.8.16 Contractor shall terminate all signal and command copper wiring on cabling installed in Scalable IBS equipment with crimped ferrule type connectors.
- 4.8.17 Contractor shall attend all on-site daily meetings between MSR, RMC, Ship's Force and NSWC.
- 4.8.18 Contractor shall install, dress in and terminate all cabling into all Scalable IBS equipment and any associated auxiliary equipment or connection boxes
- 4.8.19 Contractor shall provide the services of one (1) senior engineering technician. He/she shall be responsible for testing and troubleshooting during the SEA TRIAL underway period, if applicable.

- 4.9 Submit the following reports upon completion of the installation and hardware:
- 4.9.1 An Installation Completion Report upon completion of the installation. This report will include the following as applicable: pre- and post-installation test results, updates and/or changes to ILS and hardware requirements, recommendations, dates and names of personnel making ILS entries, SNAP data entry receipts (OPNAV Form 4790/CK) and general data such as ship name, location, date(s) and points of contact for ILS delivery aboard the ship. All identified impacted ILS changes will be provided to ship prior to departure as per Technical Specification 9090-310G.
 - 4.9.2 Bi-weekly financial and technical progress reports shall be provided on all tasks with the funding and task completion percentages. All identified disconnects between work completion and money spent will be addressed.

5.0 DELIVERABLES/SCHEDULE

- 5.1 Quality Assurance workbook to be provided 30 days prior to the start of the installation and completed sections 6 and 7 delivered within two (2) weeks at the completion of the installation (Para 4.2).
- 5.2 Electronic copy of the Microsoft Access Database delineated in Para 4.3 to be delivered to NSWC 30 days prior to the start of the installation. The final electronic copy version will be delivered to NSWC within two (2) weeks after completion of installation.
- 5.3 Detailed Installation Milestone Schedule (POA&M) will be submitted within twenty (20) working days after contract award. Updates will be submitted daily to NSWC-SSSES representative tracking progress. Format shall track progress agreement/discrepancy with POA&M (Para 4.4).
- 5.4 Bi-weekly material status report will be provided to the OSIC detailing order status, long lead-time material list and estimated delivery dates (Para 4.7).
- 5.5 Installation Completion Report will be submitted after completion of the installation (Para 4.9.1).
- 5.6 Bi-weekly financial and technical progress reports will be provided to OSIC on all tasks with funding and task completion percentages. This report should detail number of foundations and equipment installed, equipment and cables connected, tested, and completion percentage versus time expired. All identified disconnects between work completion and money spent will be addressed. (Para 4.9.2)

6.0 SCHEDULE

- 6.1 The installation preparation will commence immediately upon Delivery Order award. Installation schedule will be determined by the schedule of the DDG-51, Class ships.

7.0 GOVERNMENT FURNISHED INFORMATION/MATERIAL

- 7.1 NSWC-SSES will provide available DDG^(b)₍₂₎ lass drawings and associated documentation when available.
- 7.2 NSWC-SSES will provide all GFM.

8.0 CONTRACTOR FURNISHED MATERIAL

- 8.1 The contractor shall provide all miscellaneous and incidental installation material unless otherwise specified. See material list.

9.0 TRAVEL

- 9.1 Two (2) DDG Installation – Norfolk, VA to Pearl Harbor, HI:
- | | |
|---------|----|
| People | 5 |
| Days | 15 |
| Trip(s) | 2 |
- 9.2 Two (2) DDG Installation – Norfolk, VA to Yokosuka, Japan:
- | | |
|---------|----|
| People | 5 |
| Days | 15 |
| Trip(s) | 1 |

This Statement of Work is for Scalable Integrated Bridge Tech Refresh on three (3) ships, oversight / materials support, backfit support for tech refresh and shipboard modifications will be discussed at a later time and will be issued as a Technical Instruction (TI).

10.0 CLASSIFIED MATERIAL

- 10.1 None.

11.0 PERIOD OF PERFORMANCE

- 11.1 From Delivery Order award date to 12/31/2016.

12.0 PLACES OF PERFORMANCE

- 12.1 It is anticipated that the places of performance shall be:

Pearl Harbor ,HI

Yokosuka, Japan

13.0 OVERTIME

13.1 Overtime is requested for the installation team in order to complete the installation within the periods of availability of the ship.

14.0 CONTRACTING OFFICER'S REPRESENTATIVE (COR)

14.1 The COR for this Delivery Order is Mr. (b) (6) NSW-C-SSS Code (b)
Philadelphia, PA (b) (6)

15.0 TECHNICAL POINT OF CONTACT (TPOC)

15.1 The TPOC for this Delivery Order is Mr. (b) (6) NSW-C-SSS Code
(b) Philadelphia, PA (b) (6)

15.1 The ATPOC for this Delivery Order is Mr. (b) (6) NSW-C-SSS Code
(b) Philadelphia, PA (b) (6)

Section E - Inspection and Acceptance

INSPECTION AND ACCEPTANCE TERMS

Supplies/services will be inspected/accepted at:

CLIN	INSPECT AT	INSPECT BY	ACCEPT AT	ACCEPT BY
0002	Destination	Government	Destination	Government
000201	N/A	N/A	N/A	Government
0004	Destination	Government	Destination	Government
000401	N/A	N/A	N/A	Government
0005	N/A	N/A	N/A	Government

Section F - Deliveries or Performance

DELIVERY INFORMATION

CLIN	DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	DODAAC
0002	POP 17-FEB-2016 TO 31-DEC-2016	N/A	NAVAL SURFACE WARFARE CENTER CARDEROCK 1601 LANGLEY AVENUE, (b) (6) PHILADELPHIA, PA 19112-5051 FOB: Destination	N64498
000201	N/A	N/A	N/A	N/A
0004	POP 17-FEB-2016 TO 31-DEC-2016	N/A	NAVAL SURFACE WARFARE CENTER CARDEROCK 1601 LANGLEY AVENUE, (b) (6) PHILADELPHIA, PA 19112-5051 FOB: Destination	N64498
000401	N/A	N/A	N/A	N/A
0005	POP 17-FEB-2016 TO 31-DEC-2016	N/A	NAVAL SURFACE WARFARE CENTER CARDEROCK 1601 LANGLEY AVENUE, (b) (6) PHILADELPHIA, PA 19112-5051 FOB: Destination	N64498

Section G - Contract Administration Data

NOTE TO CONTRACTOR:

Funding in the amount of \$695,333.20 is hereby obligated under this order. As a result, the total amount of funding available under this order is \$695,333.20, which agrees with the total Cost-Plus Fixed Fee amount.

ACCOUNTING AND APPROPRIATION DATA

AA: 1751810 A1GW 251 WS060 0 050120 2D 000000

COST CODE: A00003279863

AMOUNT: \$695,333.20

CIN 130055033300001: (b) (6)

CIN 130055033300002:

Section J - List of Documents, Exhibits and Other Attachments

CONTRACT DATA REQUIREMENTS LIS

See Attached CDRs:

A001, A003, A004, A011, A014 and A016,